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Institutsleiter: Dr. ***Kui Won Choi***

No.: 22_17_01_01

Confirmation of REACH Compliance

The company **Kumho Petrochemical Co., Ltd.** having its principal place of business at *13F, East Wing, Signature Towers, #100 Cheonggyecheon-ro,Jung-gu, 100-230, Seoul, South Korea* has appointed **Korea Institute of Science and Technology Europe Forschungsgesellschaft mbH (KIST-Europe)** (UUID: ECHA-0fa08d90-ca78-43db-9070-707c1b5c7467) with its principal offices at *Universitaet des Saarlandes, Campus E 71, D-66123, Saarbruecken, Germany* to act as its Only Representative in compliance with the regulation EC 1907/2006 (REACH: Registrations, Evaluation, Authorization and Restriction of Chemicals).

According to our agreement with **Kumho Petrochemical Co., Ltd.** and the information provided by them, we confirm that no substances in Candidate List of SVHC for Authorization under REACH (updated on 12/01/2017) are contained in following products (products below) produced by **Kumho Petrochemical Co., Ltd.**.

No.	Product Name	No.	Product Name	No.	Product Name	No.	Product Name
1	ABS 710	19	ABS 780	37	ABS HU600SKG	55	ASA XC500A
2	ABS 720	20	ABS 780F	38	ABS HU600Z	56	ASA XC510
3	ABS 720R	21	ABS 780M	39	ABS HU601	57	ASA XC510A
4	ABS 722W	22	ABS 780W	40	ABS HU621	58	ASA XC520
5	ABS 728	23	ABS 795	41	ABS HU650	59	HR 181
6	ABS 728W	24	ABS ER872M	42	ABS HU650D	60	HR 190
7	ABS 740	25	ABS ER875	43	ABS HU650SK	61	HR 191
8	ABS 745	26	ABS 730	44	ABS HU650ZW	62	HAB 8740B
9	ABS 750	27	ABS BM510	45	AES HW600G	63	HAC 8240B
10	ABS 750SH	28	ABS BM530	46	ASA XC180	64	HAC 8244
11	ABS 750SW	29	ABS H2938	47	ASA XC180G	65	HAC 8244D
12	ABS 765	30	ABS H2938DS	48	ASA XC230	66	HAC 8245
13	ABS 772	31	ABS H2938L	49	ASA XC190	67	HAC 8250
14	ABS 775	32	ABS H2938Z	50	ASA XC190BM	68	HAC 8250NH
15	ABS 750SW	33	ABS HGX4500	51	ASA XC190M	69	HAC 8250W
16	ABS 775EG	34	ABS HU600	52	ASA XC220	70	HAC 8250P
17	ABS 775K	35	ABS HU600HP	53	ASA XC280G	71	HAC 8259
18	ABS 775W	36	ABS HU600SK	54	ASA XC500	72	HAC 8265

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No.	Product Name	No.	Product Name	No.	Product Name	No.	Product Name
73	HAC 8265HR	93	HFH 412	113	HI 450PG	133	SAN 310CTR
74	HAC 8265P	94	HFH 412H	114	HI 450W	134	SAN 315TR
75	HAC 8270	95	HFH 430U	115	HI 490FB	135	SAN 320A
76	HAC 8270I	96	GP 125	116	HI 470R	136	SAN 326
77	HAC 8290NH	97	GP 125E	117	MIB 237	137	SAN 326A
78	HAG 5220	98	GP 125EB	118	MIB MIB C	138	SAN 330
79	HAM 8560A	99	GP 125EI	119	MIB MIB IT	139	SAN 330I
80	HAM 8560H	100	GP 150E	120	EPS GN12	140	SAN 335T
81	HAM 8560D	101	GP 150I	121	EPS GN16	141	SAN 350
82	HAM 8560L	102	GP 150K	122	EPS GN16B	142	SAN 350A
83	HSP 8350K	103	HI 425	123	EPS GN20	143	SAN 350F
84	HAN 8654	104	HI 425E	124	EPS GN20HC	144	SAN 350HM
85	HFA 451	105	HI 425EH	125	EPS GN30	145	SAN 350HW
86	HFA 456	106	HI 425EP	126	HA PNOD	146	APH 1550F
87	HFA 700HT	107	HI 425ER	127	HA PNOE	147	ABS H2938ZW
88	HFA 703	108	HI 425ES	128	HA PNSD	149	ABS 780U
89	HFA 705	109	HI 425ESH	129	SAN 300	149	ABS 750HC
90	HFA 707	110	HI 425TV	130	SAN 300A		
91	HFH 402ND	111	HI 425TVG	131	SAN 300H		
92	HFH 407	112	HI 425TVL	132	SAN 310TR		

ID	SVHCs name	EC No	% in Product
1	α,α-Bis[4-(dimethylamino)phenyl]-4(phenylamino)naphthalene-1-methanol(C.I.SolventBlue4)	229-851-8	n/d
2	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	202-959-2	n/d
3	1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β-TGIC)	423-400-0	n/d
4	Diboron trioxide	215-125-8	n/d
5	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	203-977-3	n/d
6	4,4'-bis(dimethylamino)-4''-(methylamino)tritylalcohol	209-218-2	n/d
7	Lead(II) bis(methanesulfonate)	401-750-5	n/d
8	Formamide	200-842-0	n/d
9	[4-[4,4'-bis(dimethylamino)benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammoniumchloride(C.I.BasicViolet3)	208-953-6	n/d
10	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	203-794-9	n/d

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11	[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene]dimethylammoniumchloride(C.I.BasicBlue26)	219-943-6	n/d
12	1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC)	219-514-3	n/d
13	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	202-027-5	n/d
14	4-(1,1,3,3-tetramethylbutyl)phenol	205-426-2	n/d
15	N,N-dimethylacetamide	204-826-4	n/d
16	Phenolphthalein	201-004-7	n/d
17	Lead diazide, Lead azide	236-542-1	n/d
18	Lead dipicrate	229-335-2	n/d
19	1,2-dichloroethane	203-458-1	n/d
20	Calcium arsenate	231-904-5	n/d
21	Dichromium tris(chromate)	246-356-2	n/d
22	2-Methoxyaniline; o-Anisidine	201-963-1	n/d
23	Pentazinc chromate octahydroxide	256-418-0	n/d
24	Arsenic acid	231-901-9	n/d
25	Potassium hydroxyoctaoxodizincatedichromate	234-329-8	n/d
26	Formaldehyde, oligomeric reaction products with aniline	500-036-1	n/d
27	Lead styphnate	239-290-0	n/d
28	Trilead diarsenate	222-979-5	n/d
29	Zirconia Aluminosilicate Refractory Ceramic Fibres	-	n/d
30	Bis(2-methoxyethyl) phthalate	204-212-6	n/d
31	Aluminosilicate Refractory Ceramic Fibres	-	n/d
32	Bis(2-methoxyethyl) ether	203-924-4	n/d
33	2,2'-dichloro-4,4'-methylenedianiline	202-918-9	n/d
34	Cobalt dichloride	231-589-4	n/d
35	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	276-158-1	n/d
36	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	271-084-6	n/d
37	Strontium chromate	232-142-6	n/d

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38	1-Methyl-2-pyrrolidone	212-828-1	n/d
39	1,2,3-Trichloropropane	202-486-1	n/d
40	2-Ethoxyethyl acetate	203-839-2	n/d
41	Hydrazine	206-114-9	n/d
42	Cobalt(II) diacetate	200-755-8	n/d
43	Cobalt(II) sulphate	233-334-2	n/d
44	2-Ethoxyethanol	203-804-1	n/d
45	Acids generated from chromium trioxide and their oligomers.	231-801-5 and 236-881-5	n/d
46	2-Methoxyethanol	203-713-7	n/d
47	Chromium trioxide	215-607-8	n/d
48	Cobalt(II) carbonate	208-169-4	n/d
49	Cobalt(II) dinitrate	233-402-1	n/d
50	Trichloroethylene	201-167-4	n/d
51	Potassium dichromate	231-906-6	n/d
52	Tetraboron disodium heptaoxide, hydrate	235-541-3	n/d
53	Ammonium dichromate	232-143-1	n/d
54	Boric acid	233-139-2 and 234-343-4	n/d
55	Sodium chromate	231-889-5	n/d
56	Disodium tetraborate, anhydrous	215-540-4	n/d
57	Potassium chromate	232-140-5	n/d
58	Acrylamide	201-173-7	n/d
59	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	215-693-7	n/d
60	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	235-759-9	n/d
61	Anthracene oil	292-602-7	n/d
62	2,4-Dinitrotoluene	204-450-0	n/d
63	Anthracene oil, anthracene paste, anthracene fraction	295-275-9	n/d
64	Anthracene oil, anthracene-low	292-604-8	n/d
65	Tris(2-chloroethyl)phosphate	204-118-5	n/d
66	Diisobutyl phthalate	201-553-2	n/d

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67	Lead chromate	231-846-0	n/d
68	Anthracene oil, anthracene paste	292-603-2	n/d
69	Pitch, coal tar, high temp.	266-028-2	n/d
70	Anthracene oil, anthracene paste,distn. lights	295-278-5	n/d
71	Lead hydrogen arsenate	232-064-2	n/d
72	Benzyl butyl phthalate (BBP)	201-622-7	n/d
73	Bis (2-ethylhexyl)phthalate (DEHP)	204-211-0	n/d
74	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	201-329-4	n/d
75	Diarsenic trioxide	215-481-4	n/d
76	Bis(tributyltin)oxide (TBTO)	200-268-0	n/d
77	Triethyl arsenate	427-700-2	n/d
78	Diarsenic pentaoxide	215-116-9	n/d
79	Sodium dichromate	234-190-3	n/d
80	Dibutyl phthalate (DBP)	201-557-4	n/d
81	4,4'- Diaminodiphenylmethane (MDA)	202-974-4	n/d
82	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	287-476-5	n/d
83	Anthracene	204-371-1	n/d
84	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified: Alpha-hexabromocyclododecane Beta-hexabromocyclododecane Gamma-hexabromocyclododecane	247-148-4, 221-695-9	n/d
85	Pyrochlore, antimony lead yellow	232-382-1	n/d
86	6-methoxy-m-toluidine (p-cresidine)	204-419-1	n/d
87	Henicosafluoroundecanoic acid	218-165-4	n/d
88	Hexahydromethylphthalic anhydride	247-094-1, 243-072-0, 256-356-4 and 260-566-1	n/d
89	Cyclohexane-1,2-dicarboxylic anhydride	201-604-9, 236-086-3 and 238-009-9	n/d
90	Dibutyltin dichloride (DBTC)	211-670-0	n/d
91	Lead bis(tetrafluoroborate)	237-486-0	n/d
92	Lead dinitrate	233-245-9	n/d

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93	Silicic acid, lead salt	234-363-3	n/d
94	4-Aminoazobenzene	200-453-6	n/d
95	Lead titanium zirconium oxide	235-727-4	n/d
96	Lead monoxide (lead oxide)	215-267-0	n/d
97	o-Toluidine	202-429-0	n/d
98	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	421-150-7	n/d
99	Silicic acid (H2Si2O5), barium salt (1:1), lead-doped	272-271-5	n/d
100	Trilead bis(carbonate)dihydroxide	215-290-6	n/d
101	Furan	203-727-3	n/d
102	N,N-dimethylformamide	200-679-5	n/d
103	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated	-	n/d
104	4-Nonylphenol, branched and linear	-	n/d
105	4,4'-methylenedi-o-toluidine	212-658-8	n/d
106	Diethyl sulphate	200-589-6	n/d
107	Dimethyl sulphate	201-058-1	n/d
108	Lead oxide sulfate	234-853-7	n/d
109	Lead titanium trioxide	235-038-9	n/d
110	Acetic acid, lead salt, basic	257-175-3	n/d
111	[Phthalato(2-)]dioxotrilead	273-688-5	n/d
112	Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	214-604-9	n/d
113	N-methylacetamide	201-182-6	n/d
114	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	201-861-7	n/d
115	1,2-Diethoxyethane	211-076-1	n/d
116	Tetralead trioxide sulphate	235-380-9	n/d
117	N-pentyl-isopentylphthalate	-	n/d
118	Dioxobis(stearato)trilead	235-702-8	n/d
119	Tetraethyllead	201-075-4	n/d
120	Pentalead tetraoxide sulphate	235-067-7	n/d
121	Pentacosafluorotridecanoic acid	276-745-2	n/d

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122	Tricosafluorododecanoic acid	206-203-2	n/d
123	Heptacosafluorotetradecanoic acid	206-803-4	n/d
124	1-bromopropane (n-propyl bromide)	203-445-0	n/d
125	Methoxyacetic acid	210-894-6	n/d
126	4-methyl-m-phenylenediamine (toluene-2,4-diamine)	202-453-1	n/d
127	Methyloxirane (Propylene oxide)	200-879-2	n/d
128	Trilead dioxide phosphonate	235-252-2	n/d
129	o-aminoazotoluene	202-591-2	n/d
130	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	284-032-2	n/d
131	4,4'-oxydianiline and its salts	202-977-0	n/d
132	Orange lead (lead tetroxide)	215-235-6	n/d
133	Biphenyl-4-ylamine	202-177-1	n/d
134	Diisopentylphthalate	210-088-4	n/d
135	Fatty acids, C16-18, lead salts	292-966-7	n/d
136	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	204-650-8	n/d
137	Sulfurous acid, lead salt, dibasic	263-467-1	n/d
138	Lead cyanamidate	244-073-9	n/d
139	Cadmium	231-152-8	n/d
140	Ammonium pentadecafluorooctanoate (APFO)	223-320-4	n/d
141	Pentadecafluorooctanoic acid (PFOA)	206-397-9	n/d
142	Dipentyl phthalate (DPP)	205-017-9	n/d
143	4-Nonylphenol, branched and linear, ethoxylated [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof]	-	n/d
144	Cadmium oxide	215-146-2	n/d
145	Cadmium sulphide	215-147-8	n/d
146	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	209-358-4	n/d
147	Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo] -5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38)	217-710-3	n/d

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148	Dihexyl phthalate	201-559-5	n/d
149	Imidazolidine-2-thione (2-imidazoline-2-thiol)	202-506-9	n/d
150	Lead di(acetate)	206-104-4	n/d
151	Trixylyl phosphate	246-677-8	n/d
152	Cadmium chloride	233-296-7	n/d
153	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	271-093-5	n/d
154	Sodium peroxometaborate	231-556-4	n/d
155	Sodium perborate; perboric acid, sodium salt	239-172-9 234-390-0	n/d
156	Cadmium fluoride	232-222-0	n/d
157	Cadmium sulphate	233-331-6	n/d
158	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	223-346-6	n/d
159	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	247-384-8	n/d
160	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	239-622-4	n/d
161	reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE)		n/d
162	1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate (EC No. 201-559-5)	271-094-0 272-013-1	n/d
163	5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2] [covering any of the individual stereoisomers of [1] and [2] or any combination thereof]		n/d
164	1,3-propanesultone	214-317-9	n/d
165	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	223-383-8	n/d
166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	253-037-1	n/d
167	Nitrobenzene	202-716-0	n/d
168	Perfluorononan-1-oic-acid and its sodium and ammonium salts	206-801-3	n/d
169	Benzo[def]chrysene(Benzo[a]pyrene)	200-028-5	n/d
170	p-(1,1-dimethylpropyl)phenol	201-280-9	n/d
171	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts Nonadecafluorodecanoic acid	206-400-3	n/d
	Ammonium nonadecafluorodecanoate	221-470-5	n/d

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	Decanoic acid, nonadecafluoro-, sodium salt		n/d
172	4-Heptylphenol, branched and linear substances with a linear and/or branched alkyl chain with a carbon number of 7 covalently bound predominantly in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof		n/d
173	4,4'-isopropylidenediphenol	201-245-8	n/d

n/d = non detected

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